WE CLAIM:

1. A method of surgery comprising:

forming concave surfaces in endplates of confronting vertebral bodies; and

inserting between the formed concave surfaces an intervertebral disc endoprosthesis wherein the intevertebral disc endoprosthesis comprises:

L-shaped supports wherein each of the L-shaped support comprises an exterior convex surface adapted to mate with one of the formed concave surfaces; and

a resilient body interposed between the L-shaped supports.

2. The method of claim 1, further comprising affixing the L-shaped supports to the confronting vertebral bodies.

3. The method of claim 1, further comprising implanting at least one anchor in at least one of the confronting vertebral bodies.

4. The method of claim 3, wherein the implanting is located in an anterior surface of the at least one of the confronting vertebral bodies.

5. The method of claim 4, further comprising affixing a bone surface milling mechanism to the at least one anchor.

6. The method of claim 1 wherein the resilient body comprises a relative stiff portion and a relative supple portion.

7. A method of surgery comprising:

implanting at least one anchor in an anterior surface of at least one of confronting vertebral bodies;

forming concave surfaces in the endplates of the confronting vertebral bodies; and

inserting between the formed concave surfaces an intervertebral disc endoprosthesis comprising:

confronting supports, each support having an exterior convex surface adapted to mate with one of the formed concave surfaces; and

a resilient body interposed between the supports.

8. The method of claim 7, further comprising affixing a bone surface milling mechanism to the at least one anchor.

9. The method of claim 7, further comprising removing damaged disc material.

10. The method of claim 7 wherein the resilient body comprises a relative stiff portion and a relative supple portion.

11. A method of spinal surgery comprising:

forming mounting holes in one or more vertebral bodies of a patient's spine;

implanting at least one anchor into one of the mounting holes;

utilizing the at least one anchor to mount a bone mill on the patient's spine;

milling confronting bone surfaces on and in the patient's spine to a predetermined surface shape;

removing the bone mill; and

mounting an intervertebral disc endoprosthesis having a predetermined outer surface shape so that outer surfaces of the intervertebral disc endoprosthesis mate with the previously milled bone surfaces and are capable of motion relative to each other.

12. A method of endoprosthetic discectomy surgery comprising:

receiving information about the size, shape, and nature of a patient's involved natural spinal vertebral bodies and natural spinal vertebral discs from imaging devices;

removing at least the involved and damaged natural spinal disc material from the patient's spine;

implanting at least one anchor into a hole having a predetermined position in an anterior surface of at least one adjacent vertebral body;

forming concave surfaces in the adjacent vertebral bodies; and

implanting into the patient's spine, an intervertebral disc endoprosthesis comprising a resilient disc body and concaval-convex elements that at least partly surround and are capable of movement relative to the resilient disc body in the patient's spine.

13. The method of claim 12, further comprising affixing a bone surface milling mechanism to the at least one anchor.

14. The method of claim 12 wherein the concaval-convex elements are adjacent to the resilient body.

15. The method of claim 12 wherein the concaval-convex elements are in contact with the resilient body.

16. A method of surgery comprising:

implanting at least one anchor into a hole having a predetermined position in an anterior surface of at least one adjacent vertebral body;

affixing a bone surface milling mechanism to the at least one anchor;

forming concave surfaces in the endplates of the adjacent vertebral bodies; and

inserting between the formed concave surfaces an intervertebral disc endoprosthesis, comprising:

confronting concaval-convex supports, each support having an exterior convex surface adapted to mate with one of the formed concave surfaces; and

a resilient body between the concaval-convex supports.

17. The method of claim 14 wherein the concaval-convex supports are adjacent to the resilient body.

18. The method of claim 14 wherein the concaval-convex supports are in contact with the resilient body.

19. The method of claim 14 wherein the resilient body comprises a gasket portion and a nucleus portion.

20. A method of inserting a prosthesis in a disc space between two adjacent vertebral bodies, comprising:

implanting at least one anchor into a hole having a predetermined position in an anterior surface of at least one adjacent vertebral body;

affixing a bone surface milling mechanism to the at least one anchor;

forming at least a portion of a hemispherical cavity in an endplate of one of the vertebral bodies, the endplate have a remaining surface surrounding the cavity; and

inserting an endoprosthesis into the disc space and the cavity, the endoprosthesis including at least one support having an exterior convex surface adapted to mate with the cavity, and a body interposed between the at least one support and the second vertebral body, wherein the at least one support is movable relative to the body.